

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A multiple-level memory cell, comprising:
a ~~memorization~~ storage element formed of several polysilicon resistors (~~Rp1, Rp2, Rp3, Rp4, Rp5, Rp6~~) ~~associated~~ connected in series between two input/output terminals (~~11, 12~~); and
a load (~~Rf~~) in series with said resistive element, the junction point (~~12~~) thereof forming a read terminal of the memory cell, and the respective junctions (~~14, 15, 17, 18, 19~~) between said resistors of the ~~memorization~~ storage element being accessible.
2. (Currently Amended) The cell of claim 1, wherein at least certain points among said junctions (~~14, 15, 17, 18, 19~~) of the ~~memorization~~ storage element and the junction (~~16~~) of this element with the load, are connectable, individually by a switch (~~MN1, MP2, MN3, MP4, MN5, MP6~~), either to one of said input/output terminals (~~11, 12~~) of the ~~memorization~~ storage element, or to a terminal (~~13~~) of application of a predetermined voltage.
3. (Currently Amended) The cell of claim 2, wherein the ends of a same resistor (~~Rp1, Rp2, Rp3, Rp4, Rp5, Rp6~~) are not connectable to the same terminal.
4. (Currently Amended) The cell of claim 2, wherein said switches comprise MOS transistors distributed half and half between P-channel transistors (~~MP2, MP4, MP6~~) and N-channel transistors (~~MN1, MN3, MN5~~).
5. (Currently Amended) The cell of claim 1, wherein all polysilicon resistors (~~Rp1, Rp2, Rp3, Rp4, Rp5, Rp6~~) have identical nominal values.
6. (Currently Amended) The cell of claim 1, wherein the number of possible programmable levels corresponds, at most, to the number of polysilicon resistors (~~Rp1, Rp2, Rp3, Rp4, Rp5, Rp6~~) of the ~~memorization~~ storage element plus one.

7. (Currently Amended) The memory cell of claim 1, wherein the programming is performed by imposing, in one or several of said polysilicon resistors of the ~~memorization~~ storage element, a constraint current greater than a current for which the value of this resistance exhibits a maximum.

8. (Currently Amended) The cell of claim 7, wherein said constraint current is beyond a read operating current range of the ~~memorization~~ storage element.

9. (Currently Amended) A circuit for reading from at least one memory cell of claim 1, comprising an assembly of comparators (~~23, 24; 41, 42, 43~~) respectively receiving, on a first input, the voltage at the input/output terminals (~~11, 12~~) of the ~~memorization~~ storage elements and, on a second input, a reference voltage (~~V_{ref}~~) chosen according to a level to be detected by the comparator from among the desired possible levels.

10. (Original) The circuit of claim 9, comprising one comparator less than there are levels desired to be distinguished in the memory cell, and an assembly of logic gates generating as many states as there are comparators, the binary word provided by said assembly representing the state of the memory cell.

11. (Original) The circuit of claim 9, comprising a number of comparators equal to twice the number of levels which are desired to be distinguished in the cell, the comparator outputs being combined two by two in the increasing order of the reference voltages that they receive, to detect one level per comparator pair.